



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

## NOTICE OF ALLOWANCE AND FEE(S) DUE

24498 7590 01/11/2010

Robert D. Shedd, Patent Operations  
THOMSON Licensing LLC  
P.O. Box 5312  
Princeton, NJ 08543-5312

EXAMINER

LEE IV, THOMAS E

ART UNIT

PAPER NUMBER

2447

DATE MAILED: 01/11/2010

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/580,943

05/30/2006

Philippe Bordes

PF030177

8873

TITLE OF INVENTION: DEVICE AND METHOD FOR THE PREPARATION OF SENDING DATA AND CORRESPONDING PRODUCTS

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0	\$1810	04/12/2010

**THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.**

**THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.**

### HOW TO REPLY TO THIS NOTICE:

#### I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

**IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.**

# **PART B - FEE(S) TRANSMITTAL**

**Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
or Fax (571)-273-2885**

**INSTRUCTIONS:** This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)

24498 7590 01/11/2010

Robert D. Shedd, Patent Operations  
THOMSON Licensing LLC  
P.O. Box 5312  
Princeton, NJ 08543-5312

Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

## **Certificate of Mailing or Transmission**

I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below.

(Depositor's name)
(Signature)
(Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/580,943 05/30/2006 Philippe Bordes PF030177 8873

TITLE OF INVENTION: DEVICE AND METHOD FOR THE PREPARATION OF SENDING DATA AND CORRESPONDING PRODUCTS

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0	\$1810	04/12/2010

EXAMINER	ART UNIT	CLASS-SUBCLASS
LEE IV, THOMAS E	2447	709-231000

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).

- ☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.
- ☐ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. **Use of a Customer Number is required.**

2. For printing on the patent front page, list

- (1) the names of up to 3 registered patent attorneys or agents OR, alternatively, 1 \_\_\_\_\_
- (2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed. 2 \_\_\_\_\_
- 3 \_\_\_\_\_

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE (B) RESIDENCE: (CITY and STATE OR COUNTRY)

Please check the appropriate assignee category or categories (will not be printed on the patent) : ☐ Individual ☐ Corporation or other private group entity ☐ Government

4a. The following fee(s) are submitted:

- ☐ Issue Fee
- ☐ Publication Fee (No small entity discount permitted)
- ☐ Advance Order - # of Copies \_\_\_\_\_

4b. Payment of Fee(s); (Please first reapply any previously paid issue fee shown above)

- ☐ A check is enclosed.
- ☐ Payment by credit card. Form PTO-2038 is attached.
- ☐ The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number \_\_\_\_\_ (enclose an extra copy of this form).

5. Change in Entity Status (from status indicated above)

- ☐ a. Applicant claims SMALL ENTITY status. See 37 CFR 1.27. ☐ b. Applicant is no longer claiming SMALL ENTITY status. See 37 CFR 1.27(g)(2).

NOTE: The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office.

Authorized Signature \_\_\_\_\_

Date \_\_\_\_\_

Typed or printed name \_\_\_\_\_

Registration No. \_\_\_\_\_

This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/580,943

05/30/2006

Philippe Bordes

PF030177

8873

24498

7590

01/11/2010

Robert D. Shedd, Patent Operations  
THOMSON Licensing LLC  
P.O. Box 5312  
Princeton, NJ 08543-5312

EXAMINER

LEE IV, THOMAS E

ART UNIT

PAPER NUMBER

2447

DATE MAILED: 01/11/2010

## Determination of Patent Term Adjustment under 35 U.S.C. 154 (b) (application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 484 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 484 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (<http://pair.uspto.gov>).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

**Notice of Allowability**

Application No.

10/580,943

Examiner

THOMAS LEE

Applicant(s)

BORDES ET AL.

Art Unit

2447

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to a telephone interview with Joel Fogelson (Reg. No. 43,613) on 12/3/2009.
2. ☒ The allowed claim(s) is/are 1-10 and 12 (renumbered as 1-11).
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some\* c) ☐ None of the:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
- \* Certified copies not received: \_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).**
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08),  
Paper No./Mail Date \_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_.
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_.

### **DETAILED ACTION**

1. The applicants amended claims 1-13 on the amendment filed on 5/31/2009.  
Claims 1-13 are pending.

### **EXAMINER'S AMENDMENT**

2. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Joel Fogelson (Reg. No. 43,613) on 12/3/2009.

The application has been amended as follows:

- Claim 1, rewrite as follows --"A device for preparation of data to be sent in a continuous stream to at least one receiver via a communication network, said device comprising: memory; means of obtainment of said data originating from a database, said database containing at least two data stream entities for data associated respectively with different transmission throughputs; means of transfer of said obtained data to a system for sending said data as a continuous stream over said network; means of connection of said means of obtainment to one of said data stream entities of the database; and means of switching of the means of connection from one of said data stream entities to another of said data stream entities; wherein: said device comprises means of

Art Unit: 2447

regular increment addition to said data transferred to the system, of error correction codes to form an augmented data stream; said means of switching being designed to switch the means of connection from a first of said data stream entities, associated, with a first sending throughput, to a second of said data stream entities, associated with a second sending throughput greater than said first sending throughput, when the stream of said data transferred augmented with said added error correction codes reaches a threshold throughput equal to the sum of the second sending throughput and of an additional throughput associated with an initial input of error correction codes for said second data stream entity; and said means of addition being designed to reinitialize the addition of said error correction codes to said initial input upon the switching of said first data stream entity to said second data stream entity.”--;

- Claim 4, line 4 delete “of addition” and insert --“of regular increment addition”--;
- Claim 4, line 5 delete “selected entity” and insert --“selected one of said data stream entities”--;
- Claim 6, line 2 delete “such that” and insert --“for”--;
- Claim 6, line 3 delete “causes” and insert --“to cause”--;
- Claim 7, line 5 delete “that is”;
- Claim 8, rewrite as follows --“A server, wherein said server comprises a data preparation device to for preparation of data to be sent in a continuous stream

Art Unit: 2447

to at least one receiver via a communication network, said data preparation device comprising: memory; means of obtainment of said data originating from a database, said database containing at least two data stream entities for data associated respectively with different transmission throughputs; means of transfer of said obtained data to a system for sending said data as a continuous stream over said network; means of connection of said means of obtainment to one of said data stream entities of the database; means of switching of the means of connection from one of said data stream entities to another of said data stream entities; means of regular increment addition to said data transferred to the system, of error correction codes to form an augmented data stream; said means of switching being designed to switch the means of connection from a first of said data stream entities, associated, with a first sending throughput, to a second of said data stream entities, associated with a second sending throughput greater than said first sending throughput, when the stream of said data transferred augmented with said added error correction codes reaches a threshold throughput equal to the sum of the second sending throughput and of an additional throughput associated with an initial input of error correction codes for said second data stream entity; and said means of addition being designed to reinitialize the addition of said error correction codes to said initial input upon the switching of said first data stream entity to said second data stream entity."--;

- Claim 9, line 1 delete "of data";

Art Unit: 2447

- Claim 10, rewrite as follows --“A method for preparation of data to be sent in a continuous stream to at least one receiver via a communication network comprising the steps of: obtaining said data originating from a database, said database containing at least two data stream entities for data associated respectively with different transmission throughputs, by extracting said data from one of said data stream entities; transferring said obtained data to a system sending said data as a continuous stream over said network; switching from one of said data stream entities to another of said data stream entities to obtain said data; adding error correction codes of regular increments to said data transferred to the system, to form an augmented data stream; switching from a first of said data stream entities, associated, with a first sending throughput, to a second of said data stream entities, associated with a second sending throughput greater than said first sending throughput, when the stream of said data transferred augmented with said added error correction codes reaches a threshold throughput equal to the sum of the second sending throughput and of an additional throughput associated with an initial input of error correction codes for said second data stream entity; and reinitializing the addition of said error correction codes to said initial input when switching from said first data stream entity to said second data stream entity.”--;
- Cancel claim 11;
- Claim 12, line 1 delete “data”; and



- Cancel claim 13.

***Allowable Subject Matter***

3. Claims 1-10 and 12 are allowed.

4. The following is an examiner's statement of reasons for allowance:

Independent claims 1, 8, and 10 define the distinct features of obtaining at least two data streams from a database for data with different throughputs, transferring the obtained data of the data streams to a system for transfer in a continuous stream, connecting to one of the data streams, adding regular increments of error correction codes to the obtained data stream, switching to the second data stream, associated with a greater sending throughput, when the first data being transferred with additional error correction codes reaches a threshold throughput equal to the sum of the second data stream and an initial input of error correction codes, and reinitializing the addition of error correction codes for the second data stream upon switching. The closest prior art, Itoh et al. (US 2003/0231589 A1) teaches a data stream with different throughputs, connecting to data streams, adding increments of error correction codes to obtained data stream, switching to a different throughput for the data stream when the data transferred with additional error correction codes reaches a threshold equal to a preset value, and reinitializing the addition of error correction codes for the different data stream throughput, but fails to teach the database of different data stream entities, regular increment addition of error correction codes, and switching of the data stream

entities. The above limitations in conjunction with all other limitations of the dependent and independent claims 1-10 and 12 are hereby allowed.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### ***Conclusion***

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Klayman et al. (US Patent 5,699,365) teaches a method for adaptive forward error correction in data communication;
- Li et al. (US 2003/0135631 A1) teaches a process for streaming delivery of dynamically scalable media content over a network utilizing rate distortion;
- Itoh et al. (US 2003/0231589 A1) teaches utilizing a variable transport rate updated over time and utilizing adaptive forward error correction; and
- Viridi et al. (US 2006/0026294 A1), which does not qualify as prior art, teaches adding regular increments of padding bits to reach a threshold equal to the next video frame transmission level and switching to the next video frame transmission level.

Art Unit: 2447

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to THOMAS LEE whose telephone number is (571) 270-7292. The examiner can normally be reached on Monday to Friday, 7:30am - 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Hwang can be reached on (571) 272-4036. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/T.L./

Examiner, Art Unit 2447

7 December 2009

/Joon H. Hwang/

Supervisory Patent Examiner, Art Unit 2447